On page 18, line 32-33, replace "PCT US88/02746 (filed September 21, 1988, published March 29, 1989)" with --PCT/US88/03195 (filed September 21, 1988, published March 23, 1989)--.

In the Claims:

Please add the following new claims:

57. (New) A nucleic acid hybridization probe, comprising an oligonucleotide from 10 to 100 nucleotides in length which will hybridize with at least 10 contiguous bases of a nucleotide base sequence region of *Mycobacterium tuberculosis* nucleic acid to form a detectable hybridization duplex under selective hybridization conditions, wherein said region consists of a nucleotide base sequence selected from the group consisting of SEQ ID NOs. 3 and 8, and their fully complementary sequences of the same length.

58. (New) The probe of claim 57, wherein said oligonucleotide is from 15 to 50 nucleotides in length.

59. (New) The probe of claim 57, wherein said oligonucleotide comprises a nucleotide base sequence selected from the group consisting of SEQ ID NOs. 3 and 8, and their fully complementary sequences of the same length.

60. (New) The probe of claim 57, wherein said oligonucleotide consists of a nucleotide base sequence selected from the group consisting of SEQ ID NOs. 3 and 8, and their fully complementary sequences of the same length.

61. (New) The probe of claim 57 containing a detectable label.

62. (New) The probe of claim 61, wherein said detectable label is an acridinium ester.

63. (New) A specifically detectable nucleic acid hybrid formed under selective hybridization conditions between the hybridization probe of claim 57 and a nucleic acid comprising a *Mycobacterium tuberculosis* nucleotide base sequence.

64. (New) A specifically detectable nucleic acid hybrid formed under selective hybridization conditions between the hybridization probe of claim 58 and a nucleic acid comprising a *Mycobacterium tuberculosis* nucleotide base sequence.

65. (New) A specifically detectable nucleic acid hybrid formed under selective hybridization conditions between the hybridization probe of claim 59 and a nucleic acid comprising a *Mycobacterium tuberculosis* nucleotide base sequence.

66. (New) A specifically detectable nucleic acid hybrid formed under selective hybridization conditions between the hybridization probe of claim 60 and a nucleic acid comprising a *Mycobacterium tuberculosis* nucleotide base sequence.

67. (New) An oligonucleotide from 10 to 100 nucleotides in length able to bind to or extend through a region of *Mycobacterium tuberculosis* nucleic acid, wherein said region consists of a nucleotide base sequence selected from the group

consisting of SEQ ID NOs. 2, 7, 22 and 23, and their fully complementary sequences of the same length.

68. (New) The oligonucleotide of claim 67 from 15 to 50 nucleotides in length.

69. (New) The oligonucleotide of claim 67, comprising a nucleotide base sequence selected from the group consisting of SEQ ID NOs. 2, 7, 22 and 23, and their fully complementary sequences of the same length.

70. (New) The oligonucleotide of claim 67, consisting of a nucleotide base sequence selected from the group consisting of SEQ ID NOs. 2, 7, 22 and 23, and their fully complementary sequences of the same length.

71. (New) The oligonucleotide of claim 67 which comprises, in the 5' upstream region, an oligonucleotide sequence which is recognizable by an RNA polymerase and enhances initiation or elongation by said RNA polymerase.

72. (New) The oligonucleotide of claim 71, comprising a nucleotide base sequence selected from the group consisting of SEQ ID NOs. 1, 6 and 19.

73. (New) The oligonucleotide of claim 71, consisting of a sequence selected from the group consisting of SEQ ID NOs. 1, 6 and 19.

74. A composition able to amplify *Mycobacterium tuberculosis* nucleic acid, comprising: one or more oligonucleotide from about 10 to about 100 nucleotide bases in length which will, under nucleic acid amplification conditions, bind to or extend through a region of *Mycobacterium tuberculosis* nucleic acid consisting of a nucleotide base sequence, said region selected from the group consisting of:

a) SEQ ID NO: 23,

b) SEQ ID NO: 8,

c) SEQ ID NO: 7,

d) SEQ ID NO: 9,

e) SEQ ID NO: 10, and

f) the nucleotide sequences perfectly complementary to these sequences.

75. The composition of claim 74 comprising two or more said oligonucleotides.

76. The composition of claim 74 comprising a first oligonucleotide which comprises a nucleotide base sequence selected from the group consisting of SEQ ID NO: 23, and SEQ ID NO: 7.

77. The composition of claim 76 comprising a second oligonucleotide which comprises a nucleotide base sequence selected from the group consisting of SEQ ID NO: 23, and SEQ ID NO: 7.

78. The composition of any one of claims 74, 75, or 76, wherein one or more oligonucleotide further comprises, in the 5' upstream region, a nucleotide base sequence which is

recognized by an RNA polymerase and which enhances transcription initiation or polymerization by said RNA polymerase.

79. The composition of any one of claims 74, 76, or 77, further comprising a nucleic acid hybridization assay probe from about 10 to about 100 nucleotide bases in length which will hybridize with at least 10 contiguous bases of a nucleotide base sequence region of *Mycobacterium tuberculosis* nucleic acid to form a detectable duplex under hybridization conditions; said region consisting of SEQ ID NO: 8 or the perfectly complementary sequence thereto.

80. The composition of claim 79, wherein said probe comprises an oligonucleotide with a nucleotide base sequence comprising SEQ ID NO: 8 or the perfectly complementary sequence thereto.

81. The composition of claim 79, wherein said probe comprises an oligonucleotide with a nucleotide base sequence consisting of SEQ ID NO: 8 or the perfectly complementary sequence thereto.

82. The composition of claim 79 wherein said probe contains a detectable label.

83. The composition of claim 82 wherein said detectable label is an acridinium ester.

84. A composition able to amplify *Mycobacterium tuberculosis* nucleic acid, comprising: one or more oligonucleotide from about 10 to about 100 nucleotide bases in length which will, under nucleic acid amplification conditions, bind to or extend through a region of *Mycobacterium tuberculosis* nucleic acid consisting of a nucleotide base sequence, said region selected from the group consisting of:

a) SEQ ID NO: 22,

b) SEQ ID NO: 3,

c) SEQ ID NO: 2,

d) SEQ ID NO: 4,

e) SEQ ID NO: 5, and

f) the nucleotide sequences perfectly complementary to these sequences.

85. The composition of claim 84 comprising two or more said oligonucleotides.

86. The composition of claim 84 comprising a first oligonucleotide which comprises a nucleotide base sequence selected from the group consisting of SEQ ID NO: 22, and SEQ ID NO: 2.

87. The composition of claim 86 comprising a second oligonucleotide which comprises a nucleotide base sequence selected from the group consisting of SEQ ID NO: 22, and SEQ ID NO: 2.

88. The composition of any one of claims 84, 85, or 86, wherein one or more oligonucleotide further comprises, in the 5' upstream region, a nucleotide base sequence which is recognized by an RNA polymerase and which enhances transcription initiation or polymerization by said RNA polymerase.

89. The composition of any one of claims 84, 86, or 87, further comprising a nucleic acid hybridization assay probe from about 10 to about 100 nucleotide bases in length which will hybridize with at least 10 contiguous bases of a nucleotide base sequence region of *Mycobacterium tuberculosis* nucleic acid to form a detectable duplex under hybridization conditions; said region consisting of SEQ ID NO: 3 or the perfectly complementary sequence thereto.

90. The composition of claim 89, wherein said probe comprises an oligonucleotide with a nucleotide base sequence comprising SEQ ID NO: 3 or the perfectly complementary sequence thereto.

91. The composition of claim 89, wherein said probe comprises an oligonucleotide with a nucleotide base sequence consisting of SEQ ID NO: 3 or the perfectly complementary sequence thereto.

92. The composition of claim 84 wherein said probe contains a detectable label.

93. The composition of claim 92 wherein said detectable label is an acridinium ester.

94. (New) A helper probe consisting essentially of a nucleotide sequence selected from the group consisting of: SEQ ID NO:9, and SEQ ID NO:10.

95. (New) A helper probe consisting essentially of a nucleotide sequence selected from the group consisting of: SEQ ID NO:4, and SEQ ID NO:5.

96. (New) A probe mix comprising:

a nucleic acid hybridization assay probe comprising an oligonucleotide from 10 to 100 nucleotides in length which will hybridize with at least 10 contiguous bases of a region of *Mycobacterium tuberculosis* nucleic acid to form a detectable hybridization duplex under selective hybridization conditions, wherein said region consists of SEQ ID NO. 8, or its fully complementary sequence of the same length, and

a helper probe.

97. (New) The probe mix of claim 96, wherein said helper probe consists essentially of a nucleic acid sequence selected from the group consisting of: SEQ ID NO:9, and SEQ ID NO:10.

98. (New) A probe mix comprising:

a nucleic acid hybridization assay probe comprising an oligonucleotide from 10 to 100 nucleotides in length which will hybridize with at least 10 contiguous bases of a region of *Mycobacterium tuberculosis* nucleic acid to form a detectable